Math 212: Multivariable Calculus, Section 3, Spring 2015

Instructor: Prof. Alexander Kiselev
Office: HBH 428
Email: kiselev@rice.edu
Class Hours: TTh 9:25-10:40
Classroom: HBH 227
Office Hours: W 10-11am, Th 2-3pm, also by appointment.

Text: *Vector Calculus, 5th ed.* by Jerrold Marsden and Anthony Tromba.

Objectives and Outcomes: By the end of the course, students should have knowledge of many techniques of multivariable and vector calculus. Specifically, they should be able to solve optimization problems finding maxima and minima of functions using differentiation, take double and triple integrals, analyze vector fields and compute their divergence and curl, analyze and compute integrals over parametrized curves and surfaces.

Help Sessions: There are help sessions run by the TAs on the following days:

Day	Location
Tuesday 6-8pm	HBH 427
Thursday 6-8pm	HBH 427
Sunday 6-8pm	HBH 427

Homework: Homework will be due every Friday at 3:00pm. It will be posted to Owlspace by Friday evening (the first homework assignment is already posted). It should be turned in to the box labeled "Math 212, Section 3" in the math department office on the second floor of Hermann Brown Hall. The box will contain folders with alphabet ranges on them. Please insert your homework into the folder appropriate for your last name. For instance, if your last name is "Smith", then your homework would go into the folder labeled "Q-Z".

Your homework solutions must be legible, all steps must be shown, and your answers should be clearly indicated. Also, your homework *must* be stapled together.

Collaboration on homework is encouraged, but each student must independently write up his/her own solutions. You are free to use calculators and computer algebra systems on the homework, but be warned that no calculators/computers will be allowed to be used during the exams.

Late homework is never accepted, but the lowest homework grade is dropped.

Exams: There will be two midterm exams and one comprehensive final exam. The exams will be pledged and closed book. You are not allowed to collaborate on exams. Calculators will not be allowed. The midterm exams will be held outside of class, and are scheduled

for Wednesday, February 18th and Tuesday, March 24th at 7pm. If you have a conflict, you must speak to me *well in advance.*

Final exam scheduling policy: It is a firm math department policy that no final exam may be given early to accommodate student travel plans. No exceptions will be made.

Grading: The two midterms will count for 20% each, the homework will count for 20%, and the final will count for 40%.

Absence policy: while attendance will not be taken in class, it is very important for success in the course. The course is fast paced, so it is easy to fall behind. If you have to miss a class, make sure that you study and understand the material you missed. Missing exams is only acceptable in case of an unavoidable conflict with another exam, or in exceptional cases of sickness or human tragedy. You have to make an effort to talk to me well in advance if you realize that you cannot make any of the exams.

Disability support: Any student with a documented disability seeking academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All such discussions will remain as confidential as possible. Students with disabilities will need to also contact Disability Support Services at the Allen Center.

Changes to syllabus: Information in syllabus, other than the absence policy, is subject to change with a reasonable advance notice, as deemed appropriate by the instructor.

Tentative schedule: The following schedule is tentative and subject to change.

Week	Dates	Sections covered
1	1/12	1.1, 1.2, 1.3
2	1/19 (MLK day)	1.3, 1.4, 1.5
3	1/26	2.1, 2.2, 2.3
4	2/2	2.4, 2.5, 2.6
5	2/9	3.1, 3.3
6	2/16	3.4, 5.1, 5.2
7	2/23	5.3, 5.4, 5.5
8	3/2 (Spring Break)	
9	3/9	6.1, 6.2
10	3/16	4.2, 4.3, 4.4
11	3/23	7.1, 7.2
12	3/30 (Midterm recess)	7.3, 7.4
13	4/6	7.5, 7.6
14	4/13	8.1, 8.2
15	4/20	8.3, 8.4